

CHAPTER 7

TRANSPORTATION

I. Creating an Integrated, Sustainable Transportation System that Enhances Quality of Life

A. Introduction

Transportation is critically important to King County and the surrounding region and has profound effects on quality of life and the vitality of the economy. Transportation provides access to jobs, education, services, recreation, and other destinations throughout King County. King County plays a central role in the regional transportation sector, supporting a variety of motorized, nonmotorized, air and marine transportation needs and providing services and facilities ranging from local to international. The county has direct responsibility for the unincorporated area road network. It provides transit services and facilities throughout the county, including within cities, and also performs many of Sound Transit's services under contract. The King County International Airport (KCIA) is owned, operated and maintained by the county. King County operates passenger-only ferry service to Vashon Island and West Seattle on behalf of the King County Ferry District, a separate governmental entity. The county also provides requested road related services to over two dozen cities or other agencies through contractual agreements.

King County collaborates with the state and other local governments with the goal of providing an integrated, multi-modal transportation system for the Puget Sound region. These intergovernmental partnerships seek to ensure that the county's transportation system is designed, operated and maintained in a manner that provides mobility options for a wide range of users, contributes to safe communities for all, and helps to safeguard and enhance King County's natural resources and environment. It is important for the county's and the region's transportation system to apply the principle of "fair and just" to achieve equitable travel opportunities for all people and communities. It is also important for all jurisdictions, including King County, to exercise sound financial management in the provision of transportation services and infrastructure.

The King County Strategic Plan provides policy direction for transportation under its "What we deliver" Goal, "Economic and Built Environment: Encourage a growing and diverse King County economy and

vibrant, thriving and sustainable communities.” While this is the King County Strategic Plan’s primary reference point for the county’s transportation activities, each “What we deliver” and “How we deliver” goal has some bearing on transportation. Transportation and mobility are further implemented at King County through the functional plans: the Strategic Plan for Public Transportation and the Strategic Plan for Road Services, discussed later in the chapter.

The following summarizes county priorities for responding to policy direction established and articulated in the King County Strategic Plan, the King County Comprehensive Plan, County transportation agencies’ functional plans, and the associated state and regional laws and planning requirements:

- Coordinate and develop multimodal services and facilities for an integrated and seamless regional and local transportation system;
- Deliver transportation services that support density and growth in the urban area, and meet the transportation needs of rural areas without creating additional growth pressure;
- Maintain and preserve infrastructure that facilitates the efficient movement of freight and goods to support economic vitality and regional trade;
- Maintain safe and secure county-owned infrastructure, including roads, bridges, buses and transit facilities, and airport facilities;
- Provide transportation choices and support travel modes that use less energy, produce fewer pollutants and reduce greenhouse gases in the region;
- Provide opportunities for people to make active transportation choices by increasing the convenience, accessibility, and comfort of taking transit, walking and bicycling;
- Address the transportation needs of people of color, low-income communities, people with limited English proficiency, and others who may have limited transportation options;
- Identify and adapt to the impacts of climate change on transportation infrastructure and services;
- Incorporate sustainable development practices into the design, construction and operation of infrastructure and facilities;
- Establish and implement clear transportation service priorities and guidelines and use transportation resources wisely and efficiently;
- Develop sustainable funding sources to support the level of services needed by communities; and
- Monitor and measure system performance and use this feedback to continuously improve transportation products and services.

The current and projected economic climate, however, places severe constraints on the county’s ability to meet these important goals. The strategic plans for both the Metro Transit and Road Services Divisions identify priorities, analyze available funding and constraints, and set targets to help reach these goals.

B. Components of the Transportation Element

The transportation element of this Comprehensive Plan is comprised of the following:

- a. Transportation chapter, which includes the narrative and policy language;
- b. Technical Appendix C of this plan, which contains the Land Use and Travel Forecast Summary, the Arterial Functional Classification Map, and a transportation inventory;
- c. Transportation Needs Report (TNR), which contains a multi-year financial forecast and a multi-year list of road facility needs, and the roads Capital Improvement Program (CIP), both of which are adopted herein by reference;
- d. The Strategic Plan for Public Transportation (SPPT), and the Transit CIP, which are adopted herein by reference; and
- e. Concurrency regulation, which implements the concurrency requirements and is codified at King County Code Title 14.

C. Consistency with Plans

The framework and direction for the development of comprehensive plans are provided by growth management legislation. The transportation element of the King County Comprehensive Plan is consistent with and meets the requirements of regional and countywide plans and policies that respond to growth management legislation. The Countywide Planning Policies (CPP) have been used to guide the development of the transportation element and to ensure consistency with plans and programs developed by adjacent jurisdictions.

Regional direction for the transportation element is set by *Transportation 2040*, developed by the Puget Sound Regional Council (PSRC). *Transportation 2040* is consistent with the region's urban growth strategy, Vision 2040, also developed by the PSRC.

King County identifies improvements and strategies needed to carry out the land use vision and meet the Level of Service (LOS) requirements for transportation. Road improvements are guided by the Strategic Plan for Road Services (SPRS), prioritized in the TNR and funded in the Roads Capital Improvement Program (CIP). Public transportation investments are guided by the Strategic Plan for Public Transportation (SPPT) and are identified in the Transit CIP.

D. Transportation system, services, and county responsibilities

The region's transportation system is comprised of the following elements:

- a. Highways, arterial streets and local/neighborhood streets;
- b. Bridges;

- c. Local and express bus transit and paratransit services and facilities, including Americans with Disabilities Act (ADA) service programs;
- d. High-capacity transit;
- e. High-occupancy-vehicle lanes and ridesharing facilities;
- f. Facilities and programs for pedestrians, bicycle riders and equestrians;
- g. Facilities to accommodate freight and goods movement, including railroads, intermodal yards and distribution centers;
- h. Marine transportation services, facilities and navigable waterways;
- i. Airports;
- j. Transportation Demand Management programs, systems, facilities and technologies; and
- k. Facilities to maintain the transportation system elements.

The specific responsibilities of King County government are described below.

1. Public Transportation

Public transportation is vitally important to the Puget Sound region. It provides connections to jobs, schools, and other destinations, and enables those with limited mobility options to travel. Public transportation enhances regional economic vitality by freeing up roadway capacity and improving the mobility of people, goods, and services. It saves the region time and money. It helps accommodate regional growth by making better use of the region's existing infrastructure and benefiting the environment. Public transportation improves the quality of life for residents and visitors to the Puget Sound region.

The King County Department of Transportation's Metro Transit Division (Metro) is the designated public transportation provider for King County. Metro's mission is to provide the best possible public transportation services and improve regional mobility and quality of life in King County. Metro provides more than 100 million fixed-route transit rides per year. Its fixed route system includes a network of all-day, two-way bus routes between residential, business and other transit activity centers; peak-period commuter service to major destinations from many neighborhoods and from a network of park-and-ride lots; and local bus services that connect people to the larger transportation system. In addition to bus service, Metro provides alternative services, such as commuter vanpools, Access paratransit service, Commute Trip Reduction programs, and Rideshare Online, as well as community programs such as In Motion and car-sharing.

Metro augments its own investments by developing partnerships with local jurisdictions, other agencies, employers, and institutions to increase public transportation services and improve service effectiveness. Metro enters into agreements with public and private entities to fund new or improved public

transportation services, where the partner contribution may be in the form of direct funding or investment that results in transit speed or reliability improvements. Metro also forms partnerships to develop and promote alternative commute programs and to manage parking and traffic to make public transportation more efficient and attractive. Metro works with WSDOT and local cities to provide services that help mitigate the impacts of major construction projects.

Metro is guided by its Strategic Plan for Public Transportation 2011-2021 (SPPT) and the King County Metro Service Guidelines. SPPT defines a vision and mission for public transportation services in King County and describes the strategies to implement that vision. It also defines desired outcomes and describes how progress will be measured. The Metro Service Guidelines augment the SPPT by identifying detailed methodologies for how Metro should measure the performance of Metro's overall transit network, as well as each individual bus route, and by providing clear guidance on how Metro should use transit resources to expand restructure or reduce service.

Increasing the use of transit plays an important role in King County's efforts to mitigate climate change and support livable, healthy communities. Public transit reduces greenhouse gas emissions by eliminating private vehicle trips, mitigating traffic congestion, and supporting efficient land use. Metro's use of green vehicles, such as electric trolleys and hybrid diesel-electric buses, and cleaner-burning fuels, such as Ultra Low Sulfur diesel, add to the environmental advantage of combining many riders in a single vehicle. Metro's wide range of transportation alternatives—including vanpools, carpools, and Access paratransit—and its support of choices such car-sharing, biking and walking make transit a powerful tool to help reduce pollution and support active, healthy lifestyles.

In addition to reducing single occupant vehicle (SOV) trips, Metro is also committed to being a leader in environmentally-friendly operating and maintenance practices and minimizing its energy use. Metro educates its employees about reducing energy consumption at work and using public transportation to commute. The agency also incorporates cost-effective green building and sustainable development practices in all capital projects that it plans, designs, constructs, remodels, renovates, and operates.

Bus, rail, and waterborne transit services cross county boundaries, providing the critical transportation links on which our regional economy depends. In addition, transit services depend on convenient connections to roads, highways, and nonmotorized systems. As the region grows, coordinating transit routes and schedules among agencies and modes will make transit a more viable and convenient option for people traveling in King County. King County seeks input from a broad spectrum of county residents and businesses to identify needs and provide services to meet those needs.

T-101 The Strategic Plan for Public Transportation 2011-2021 and King County Metro Service Guidelines, or successor plans, shall guide the planning, development and implementation of the public transportation system and services operated by the King County Metro Transit Division.

2. Road System

Travelers in King County use a system of interconnected roads that includes interstate highways, state highways, urban and rural arterials, local access roads, private roads and forest/logging roads. King County is responsible for all county-owned roads, bridges, and related infrastructure in the unincorporated areas of the county, and must meet the road-related transportation needs of a very large and geographically and demographically diverse service area. The county's many bridges are an integral part of the road system, as are other components such as sidewalks, shoulders and pathways, bike lanes, guardrails, drainage and water quality facilities, traffic control equipment, and traffic cameras. Interstate highways, state highways, city roads, and private roads are not under county jurisdiction; rather, they are the responsibility of other government agencies or property owners.

The Strategic Plan for Road Services (SPRS) defines the vision and mission for the King County Department of Transportation's Road Services Division (RSD). The SPRS provides detailed direction for the response to two trends that have accelerated since the 2008 update to the Comprehensive Plan. One is that annexations, consistent with the goals of the Growth Management Act, have reduced the urban unincorporated area. By 2016, when the next major Comprehensive Plan update is developed, RSD's responsibilities will likely focus almost entirely on the rural unincorporated area. A second trend is the decline in County road funding, described in greater detail in Section IV. The SPRS guides the RSD as it is faced with the consequences of a smaller service area and reduced funding and seeks to maintain, preserve, and improve, as funding permits, the unincorporated road and bridge system for the safe and efficient movement of people, goods, and services, and quickly respond to storms, floods, and other emergencies.

The county-owned unincorporated-area road system includes approximately (2011 inventory):

- 1,534 miles of roadway;
- 181 bridges, including several jointly owned with cities;
- 102 traffic signals;
- 39,000 traffic control signs;
- 72 traffic cameras; and
- 110 miles of protective guardrail.

The users of the county road system may travel on foot or by car, public transit, truck, or bicycle, or even

on horseback. They may live in an unincorporated area, in one of the county's 39 cities, or in another county. The unincorporated road system supports local trips close to home, commuter trips, the movement of freight and goods, and regional travel between jurisdictions. The system also provides access to outdoor recreational activities in King County, which has one of the largest concentrations of outdoor recreation enthusiasts in the state. Public service providers, such as police, fire, emergency medical responders, and Metro Transit are also key users. In total, approximately one million daily trips are taken on King County's unincorporated road network. During this time of tight budgets, changing communities, annexations, and increasing traffic on aging roads and bridges, the county must manage facilities and services with exceptional care and efficiency.

3. Air Transportation

The King County International Airport/Boeing Field (KCIA) is located in south Seattle in the Duwamish River Industrial Corridor. It operates on a 24/7 basis and in all weather. Established in 1928, the airport is supported by revenue generated by its operations, rather than relying on general tax revenues. King County plans, designs, and implements services, programs, and facilities for KCIA in compliance with Federal Aviation Administration (FAA) regulatory requirements to support a safe, secure, and efficient international aerospace system. The airport is also a significant employment center and supports more than 150 aviation-related businesses including The Boeing Company. The airport is a port of entry for international flights and serves regional air carriers, national and regional cargo carriers, corporate aviation, and general aviation.

KCIA is the 34th busiest airport in the United States and ranks 25th in cargo handling. The airport's air taxi carrier serves the San Juan Islands. It is also the largest corporate aircraft center in the Pacific Northwest. Airport business activities are estimated to support almost 5,000 direct jobs, plus more than 12,000 additional jobs in King County. The airport's total positive economic impact within the Puget Sound Region and Washington State is more than \$3 billion in direct and induced economic activity, including the sale of goods and services, labor income, and tax revenues.

The King County Department of Transportation is developing a strategic plan for KCIA. This plan will be the result of a strategic planning process, which is being guided by an advisory committee comprised of Airport Roundtable members and staff from both the executive and legislative branches of King County. It is possible that the outcome of the strategic plan could be a shift in emphasis on the airport's lines of business or operating procedures. The new strategic plan will complement the FAA's mandated Airport Master Plan and Airport Layout Plan.

The Bandera and Skykomish Airports, located in eastern King County near the communities of North Bend and Skykomish, are state owned and operated. King County does not have operating or regulatory

authority over these airports, but does control land use activity adjacent to the facilities. All airports in the county should make every effort to minimize noise impacts to land uses that are especially sensitive to the effects of noise such as residential areas, hospitals and schools.

4. Marine Transportation

The King County Ferry District (KCFD) was established in 2007 as a separate government to provide broad funding support and policy direction to King County passenger-only ferry services. The King County Department of Transportation Marine Division (KCMD) currently operates the King County Water Taxi through an interlocal agreement between the KCFD and King County. The service is operated in full compliance with maritime regulations. The U.S. Coast Guard is the primary maritime regulator.

Currently, ferry services provide a mix of year-round and seasonal services between Vashon Island and Downtown Seattle and between West Seattle and Downtown Seattle.

Under contract with KCFD, King County strives to provide safe, reliable, efficient, environmentally sound, customer friendly and fiscally responsible passenger-only ferry services to the public and maintain waterborne transit as a viable alternative mode of transportation in support of regional mobility and a high quality of life. The county also plays a role in shaping regional waterborne transportation policy.

E. General Policy Guidance

- T-102** As a transportation provider and participant in regional transportation planning, King County should support, plan, design, and implement an integrated, coordinated and balanced multimodal transportation system that serves the growing travel needs of the county safely, effectively and efficiently and promotes a decrease in the share of trips made by single occupant vehicles.
- T-103** In striving to meet the growing need for transportation services, King County shall seek to maximize the efficiency and effectiveness of its services, infrastructure and facilities.
- T-104** King County should provide a system of transportation services and facilities that offers travel options to all members of the community, including people of color, low-income communities, people with limited English proficiency, and others who may have limited transportation options such as students, youth, seniors, and people with disabilities.

T-105

King County shall seek to protect its transportation system against disasters, to the extent possible, by developing prevention and recovery strategies in partnership with other jurisdictions and agencies, and planning for coordinated emergency response.

II. Providing Services and Infrastructure that Support the County Land Use Vision

This section of Chapter 7 discusses county transportation services and policies as they support the county land use strategy, which seeks to concentrate development and services in urban areas, conserve and enhance rural areas, and create communities that have a positive effect on public health and climate change. One focus of this section is on issues related to the county's responsibilities in the unincorporated area, including Level of Service (LOS) standards for county roads, transportation concurrency management, mitigation of growth-related impacts, avoidance of road expansion in rural areas, prevention of airport/land use conflicts, and support for nonmotorized transportation options. Another focus is on county transportation activities that affect a broader region, notably the four-county region's policy of concentrating development in more densely populated urban areas. King County Metro operates a majority of the transit service in the region and provides transportation demand management services to cities and employers. Consequently, the region's success in achieving its development goals will depend to a great extent on King County's ability to provide appropriate transit services within King County.

A. Land Use and Growth Strategy

The transportation element of this plan is grounded in a firm understanding of the important relationship between land use and transportation. A thoughtfully designed transportation system that supports the county's long-term land use vision and regional growth strategy should provide improved mobility and greater accessibility for all users and contribute to vibrant, thriving communities. It should also facilitate more efficient travel that reduces energy consumption and greenhouse gas emissions and other forms of pollution.

Integrated transportation and land use planning is called for at the regional level in Vision 2040, Transportation 2040, and the Countywide Planning Policies (CPPs) regarding transportation, which outline and support a regional growth strategy built around the concept that additional infrastructure and services are to be provided in areas that accept an increased share of the region's growth. The Countywide Planning Policies - Housing and Employment Growth Targets (2006-2031) adopted by King County and its cities, represent each jurisdiction's agreed upon fair share of future growth and have been incorporated into the travel demand forecast developed for this plan.

Vision 2040, Transportation 2040, and the CPPs also promote the concept of maximizing mobility choices through a multimodal approach to moving people, goods and services efficiently within and beyond the

region. Travel to and within regional growth centers is emphasized, with a focus on the availability of transit and nonmotorized modes in centers. These urban centers are characterized by compact, pedestrian-oriented development, with a mix of different office, commercial, civic, entertainment, and residential uses and can be efficiently and cost-effectively served by transit and nonmotorized travel options. In addition, these regional plans and policies address the importance of protecting and preserving the rural area and avoiding construction of major new roads and capacity expansion on existing roads in rural and resource areas.

A multimodal transportation system supports healthful choices by providing greater access to housing, jobs, schools, medical care, healthy food, shopping, recreation, and other services-- all of which contribute to a high quality of life. Designing highly connected communities that support safe nonmotorized travel and facilitate nonmotorized access to the transit system reduces vehicle miles traveled (VMT), reduces air pollution, and leads to opportunities for greater levels of physical activity through walking and bicycling.

Regional and countywide guidance also encourages innovative approaches to transportation and land use management, including Transportation Demand Management (TDM) strategies designed to reduce vehicle miles traveled, single-occupant vehicle (SOV) trips, and greenhouse gas emissions.

Metro operates transit service throughout King County, including in cities, while the county's road system service area is limited to the unincorporated area. Due to annexations and incorporations, the unincorporated road system is transitioning to become primarily rural. In the rural area, protection of natural resources, agriculture and forestry, and the rural lifestyle and character are a high priority. At the same time, there is still a certain amount of growth within the rural area, as well as high growth in some adjacent rural cities or beyond the county's boundaries, that must be considered in managing the road system.

The county's urban and rural areas form a complex landscape, and the urban/rural boundary is not a simple straight line. As a result, the county's arterial network weaves through both urban and rural areas as it facilitates regional mobility. This complex urban/rural pattern presents challenges to planning for the region's mobility needs and providing safe and adequate roadways. Issues include regional arterial corridors that link designated urban areas by crossing rural lands, and roads located on the Urban Growth Boundary. High traffic volumes on these roads may necessitate road improvements to ensure safe and efficient travel. However, it is critical to ensure that appropriate development regulations and access management strategies are first in place in order to prevent unplanned and unwanted growth in rural areas.

Growth management envisions different landscapes and infrastructure for urban and rural communities. King County is committed to managing its transportation system consistent with that vision.

- T-201** **Multimodal transportation options such as transit, bicycling and walking, are most effective in densely developed urban areas. As resources allow, King County’s transportation investments in urban areas should emphasize transit and road services and facilities that support multiple modes and facilitate connections between them.**
- T-202** **Rural densities and distances between travel destinations are less conducive to efficient use of alternative modes of transportation. As resources allow, King County’s transportation investments in rural areas should emphasize maintaining and preserving safe road infrastructure that is compatible with the preservation of rural character and does not promote urban or unplanned growth.**
- T-203** **King County should encourage transit-supportive land uses, development, facilities and policies that lead to communities that transit can serve efficiently and effectively. As funding permits, King County should partner with jurisdictions and the private sector to spur transit-supportive development that enhances opportunities for transit, pedestrians, bicyclists, car and van pools, and other alternatives to single occupant vehicles.**

B. Travel Forecasts

Travel demand forecasts are used to project transportation system needs. They provide one of the important links between land use and transportation. The travel forecasts used to identify transportation improvement needs are conducted on a schedule that coincides with major Comprehensive Plan updates. The regionally adopted growth targets for the year 2031 have been used to develop the travel demand forecasts for this plan and the Transportation Needs Report.

The travel forecasting process is based on the Puget Sound Regional Council’s modeling and forecasting techniques. The land use vision and growth targets have been incorporated into the county’s transportation zone system. These projections provide the level of detail needed to analyze future transportation system performance and to identify system improvement needs, within the framework of growth management and regional and county policy guidance regarding appropriate urban and rural levels of service.

C. Public transportation system

Metro plays an important role in achieving the region's growth strategy by focusing public transportation services in the urban growth area of King County and providing service to designated centers and other areas of concentrated activity. Centers and other communities that are compact and friendly to pedestrians and bicycles are most easily served by transit. Such communities foster healthier, more active lifestyles while reducing auto dependency and associated road investments. By the same token, transit service can support and encourage development that is more compact.

Metro supports municipal, agency and private development of transit-supportive, pedestrian-friendly communities through partnership, coordination and delivery of public transportation services. Metro also partners with jurisdictions and the private sector to spur transit-oriented development through redevelopment opportunities at or adjacent to park-and-rides.

T-204 King County should support local and regional growth plans and policies by focusing transit services on centers and other areas of concentrated activity.

T-205 King County should support, encourage, and implement high-capacity transit facilities and services that are consistent with, and supportive of, the comprehensive plan and Metro's Strategic Plan for Public Transportation.

D. Road System

T-206 Except as provided in T-209, King County shall not construct and shall oppose the construction by other agencies of any new arterials or highways in the Rural Area or natural resource lands.

T-207 King County recognizes the importance to regional and local mobility of state highways that traverse the Rural Area and should advocate for state and federal agencies to improve performance of these facilities, consistent with the county's adopted Comprehensive Plan policies to prevent unplanned development in the Rural Area and preserve rural character.

T-208 King County shall not add any new arterial capacity in the Rural Area or natural resource lands, except for segments of rural regional corridors that pass through rural or resource lands to accommodate levels of traffic between urban

areas. Rural regional corridors shall be identified in the Transportation Needs Report (Appendix C) and shall meet all of the following criteria:

- a. Connects one urban area to another, or to a highway of statewide significance that provides such connection, by traversing the Rural Area;
- b. Classified as a principal arterial;
- c. Carries high traffic volumes (at least 15,000 ADT); and
- d. At least half of P.M. peak trips on the corridor are traveling to cities or other counties.

T-209 King County shall avoid construction of major roads and capacity expansion on existing roads in rural and resource areas. Where increased roadway capacity is warranted to support safe and efficient travel through rural areas, appropriate rural development regulations and strong commitments to access management should be in place prior to authorizing such capacity expansion in order to prevent unplanned growth in rural areas.

T-210 Any capacity increases to rural regional corridors shall be designed to accommodate levels of traffic between urban areas consistent with the county's adopted Comprehensive Plan policies regarding development in the surrounding Rural Area or natural resource lands. The county shall seek to maximize the efficient use of existing roadway capacity before considering adding new capacity to rural regional corridors.

T-211 Any segment of a county roadway that forms the boundary between the Urban Growth Area and the Rural Area should be designated urban and all associated road right-of-way fully contained within the Urban Growth Area boundary. Such urban boundary roads shall be designed and constructed to urban roadway standards on both sides of the roadway segment.

T-212 King County shall work with cities for the annexation of county-owned roadways and/or street segments located in the urban area and within or between cities, in order to provide for a consistent level of urban services on the affected roads.

E. Airports

- T-213** King County should use its authority including zoning, permitting and development standards to protect the public use airports of Banderra near the town of North Bend and Skykomish airport in King County from encroachment of non-compatible land uses. Compatible airport land uses are those that comply with generally accepted Federal Aviation Administration guidance on location, height, and activity that provide for safe aircraft movement, airport operations, including expansion, and community safety.

F. Marine Transportation

- T-214** King County should support, encourage and be an active partner in local and regional passenger-only ferry transportation solutions that support mobility, accessibility, growth management, and help reduce road congestion.

G. Level of Service Standards

The Growth Management Act (GMA) requires level of service standards for all arterials and transit routes to judge performance of the transportation system. The GMA also calls for specific actions and requirements for bringing into compliance facilities or services that are not meeting the adopted level of service standard. King County's level of service standards comply with growth management policies of encouraging growth in the urban area while restricting growth in the rural area.

Level of service (LOS) is a qualitative measure that describes traffic flow and is often represented by a system using the letters A through F. LOS A represents the least congested conditions and LOS F represents the most congested conditions. LOS B is indicative of stable traffic flow. However, unlike LOS A, operating speed is beginning to be restricted by other traffic. At LOS E, operation is unstable, and speeds are reduced but will fluctuate widely from point to point. There is little independence of speed selection and maneuverability at LOS E. LOS F is indicative of forced flow of traffic with extremely low speeds and long delays at intersections.

King County recognizes a profound difference between the nature and character of the Rural Area as compared with the urban area and therefore sets LOS standards to allow less congestion in the Rural Area. In addition, King County recognizes certain areas, called Mobility Areas, where land use designations support a greater variety of transportation mode choices. The LOS standards for Mobility

Areas are set to recognize these greater choices and support and encourage people to use forms of transportation other than cars. The Rural Mobility Areas are the Rural Towns of Vashon, Snoqualmie Pass and Fall City.

In addition to the Mobility Areas, certain large Rural Neighborhood Commercial Centers are recognized as having distinct mobility characteristics and will have a LOS standard consistent with their land use character. The large Rural Neighborhood Commercial Centers are: Cottage Lake, Maple Valley, Preston and Cumberland.

The framework for identifying appropriate levels of service for King County Metro services is established in the Strategic Plan for Public Transportation and the King County Metro Service Guidelines.

- T-215 The LOS standard for the Urban Area shall be E except as provided in T-216. The LOS standard for the Rural Area shall be B except as provided in T-216, T-217, and T-218. These standards shall be used in concurrency testing.**
- T-216 The LOS standard for certain minor residential and minor commercial developments, along with certain public and educational facilities, shall be LOS F. This standard shall be used in concurrency testing.**
- T-217 The LOS standard for designated Rural Mobility Areas shall be E. This standard shall be used in concurrency testing.**
- T-218 The LOS standards for the Cottage Lake, Maple Valley, Preston and Cumberland Rural Neighborhood Commercial Centers shall be D. This standard shall be used in concurrency testing.**

H. Concurrency

The Growth Management Act (GMA) requires local jurisdictions to adopt and enforce ordinances that prohibit development approval if the development causes the LOS on identified county arterials or certain state roads to decline below the adopted LOS standards. King County's Transportation Concurrency Management program was developed to address the GMA's concurrency requirement. The Transportation Concurrency Management program requires that adequate transportation facilities must be available to carry the traffic of a proposed development at county LOS standards, or construction for needed improvements funded in the adopted Six-Year Roads Capital Improvement Program, or else the proposed development cannot be approved.

The requirements of King County's Transportation Concurrency Management program may apply to transportation facilities designated by the Washington State Department of Transportation (WSDOT) as "highways of statewide significance." The portions of certain highways of statewide significance that do not have limited access and function like county arterials may be included in the King County concurrency test.

The Transportation Concurrency Management program has been designed to meet the following goals:

- Fulfill the requirements of state growth management legislation;
- Be simple to understand, easy to implement and administer and transparent to those affected by its processes and regulations;
- Consider and encourage multimodal travel;
- Encourage growth in urban areas where provision of transportation infrastructure and services is most efficient and economical; and
- Efficiently integrate concurrency determination into the permit system process and database.

Transportation concurrency is a plan-level system that does not require testing of individual developments. Instead, concurrency status is determined by broad geographic areas called travel sheds, which were drawn to reflect where travel patterns share common characteristics. Trips associated with development within a particular travel shed would use or be affected by arterials located within and bordering that travel shed. A development proposal (including both residential and nonresidential proposals) will be considered to meet the transportation concurrency standard if it is located in a travel shed that meets LOS standards as depicted on the concurrency map in effect at the time of development application. Development proposals must still meet all applicable zoning and land use regulations.

T-219 For the purposes of concurrency testing, a travel shed is a geographic area within unincorporated King County where trips generated by development within the travel shed would likely use or be affected by traffic on arterials within the travel shed.

T-220 The concurrency program shall include provision for mobility areas within travel sheds as provided in T-217. Rural Mobility Areas shall be defined as unincorporated Rural Towns as designated in the King County Comprehensive Plan.

T-221 The concurrency map shall identify the travel sheds that meet or do not meet concurrency standards. Any proposed development in travel sheds that meet concurrency standards will be deemed concurrent.

- T-222** The concurrency test shall be based on the LOS on arterials in unincorporated King County using the county's adopted methodology. The test may be applied to designated Highways of Statewide Significance.
- T-223** The concurrency test may include provision of factors for safety, pavement condition and availability of multiple modes of transportation.
- T-224** In the Rural Area, the concurrency test may include a provision that allows the purchase of Transferable Development Rights in order to satisfy transportation concurrency requirements.

I. Impact Mitigation

The State Environmental Policy Act (SEPA) establishes environmental review of project impacts on all elements of the environment including transportation. In addition, the county has a mitigation payment system whereby developments are charged proportionate shares for transportation projects and services needed as a result of the related growth.

- T-225** Needed rights-of-way, strategies to manage transportation demand and off-site improvements should be identified and required as conditions of development approval to the extent that such conditions are directly related to impact mitigation.
- T-226** King County shall encourage the development of highly connected, grid-based arterial and nonarterial road networks in new developments and areas of in-fill development. To this end, the county should:
- a. Make specific findings at the time of land-use permit review to establish a nonarterial grid system for public and emergency access in developments; and
 - b. Require new commercial, multifamily, and residential subdivisions to develop highly connective street networks to promote better accessibility and avoid single street only access.
- T-227** Development proposals should extend the public road system through dedication when the extension is in the public interest. Conditions that may warrant such an extension include, but are not limited to, impacts on neighborhood circulation, increases in the use of arterials for local vehicular

trips, reductions in traffic safety through uncoordinated and inadequately spaced street access to arterials, and restrictions on the availability of alternative emergency access routes.

T-228 As mitigation for the impacts of new development and as a condition of development approval, the county shall require the improvement of existing offsite roadways and undeveloped road rights-of-way, and other strategies to reduce demand on roads. Impacts that may warrant such mitigation include, but are not limited to, those that create safety concerns, raise road operational issues or increase the number of residences served by a single access route.

T-229 The county shall implement a system that establishes fees needed to mitigate the growth-related transportation impacts of new development. The fees will be used to pay a development's proportionate share of transportation capital projects needed to support growth including, but not limited to, road, transit, and nonmotorized facilities. Such fees are in addition to any requirements established for transportation services and facilities needed solely as a result of the development.

J. Nonmotorized Program

Vision 2040, the region's long-range growth management, economic and transportation strategy, and Transportation 2040, the adopted Metropolitan Transportation Plan, call for the development of a regional transportation system that offers a variety of travel choices while preserving environmental quality and open space. Nonmotorized transportation plays a key role in achieving these goals and is an essential component of King County's multimodal transportation system. Pedestrians, bicyclists and in some parts of the county, equestrians, are nonmotorized users of the transportation system.

Biking and walking are energy efficient, economical, low-impact modes of travel that don't contribute to air or water pollution. By providing options for nonmotorized travel, King County helps to reduce automobile dependency and congestion, reduce greenhouse gas emissions, and create opportunities for individuals to integrate healthy exercise into everyday activities. The ability to safely bike and walk can provide varying levels of accessibility and mobility to almost everyone, including young, elderly, physically disabled, or low-income people and others who may not drive. Well-designed, strategically located bicycle and pedestrian facilities can also provide increased and safer access to transit for more people. Bicycle, pedestrian, and equestrian trails are important community amenities that foster vibrant communities and may help spur economic development. Equestrian travel is also an important aspect of the rural heritage and lifestyle of King County as well as a very popular recreational activity.

In unincorporated King County, the Road Services Division is responsible for nonmotorized facilities such as bike lanes, sidewalks, or shoulders on county roads. The division also provides crosswalks and specialized signals or signage that help facilitate safer nonmotorized travel. The King County Road Design and Construction Standards include accommodation for nonmotorized uses and specify bike lane, sidewalk, or road shoulder criteria for unincorporated urban and rural roads. Road-related nonmotorized capital needs in the unincorporated area are included in the Transportation Needs Report (TNR) and are programmed in the six-year Roads Capital Improvement Program (CIP) as funding allows. The HealthScape Transportation Programming Tool, along with other criteria, is used in prioritizing nonmotorized projects in the TNR.

King County also plays a countywide role in nonmotorized transportation through its Regional Trail System and transit services. The regional trail network, discussed in Chapter 6, is an integral component of the county's transportation system. It includes facilities located both in cities and the unincorporated area. The trail network functions as the spine of the county's nonmotorized system in many areas. Transit and walking or biking are highly synergistic; transit use tends to be highest in locations where walking and biking are prevalent, and vice versa. The Metro Transit Division supports nonmotorized transportation programs such as bike racks on transit buses and bike lockers at park-and-ride lots, employment sites and other locations. Another county resource is the King County Bike Map, an informational online map that helps bicyclists navigate safely around King County and access points of interest, such as libraries, bike shops, farmers' markets, and other public and private facilities.

T-230 King County shall consider the needs and abilities of nonmotorized users of the transportation system in the planning, design, construction, maintenance, preservation and operation of road infrastructure and other transportation facilities to the extent feasible given available funding.

T-231 Consistent with the priorities defined in the County's functional transportation plans, nonmotorized transportation system investments should aim to increase safety and mobility, facilitating mode integration, and providing opportunities for healthy activity and alternatives to driving for all populations.

T-232 King County shall evaluate and implement nonmotorized transportation improvements in its road construction projects where appropriate and feasible.

- T-233** In both urban and rural unincorporated areas of King County, the following needs will be given the highest priority when identifying, planning, and programming nonmotorized improvements:
- a. Addressing known collision locations;
 - b. Fostering safe walking and bicycling routes to schools and other areas where school-aged children regularly assemble;
 - c. Filling gaps in, or enhancing connections to, the regional trail system; and
 - d. Locations of high concentration of pedestrian and/or bicycle traffic.
- T-234** In urban areas, nonmotorized improvements should also increase access to transit and enhance connections to parks, local trails, shopping, libraries, healthcare, and other public and private services and facilities.
- T-235** The King County Regional Trail System is the centerpiece of the nonmotorized system in the Rural Area. The county's efforts to enhance the Rural Area nonmotorized network should include filling in the Regional Trail System's missing links, coordinating road and trail projects whenever possible, and considering access from roadways such as trailhead parking.
- T-236** In rural areas, nonmotorized improvements shall be consistent with providing rural levels of service, preserving rural character, and avoiding impacts to the environment and significant historic properties.
- T-237** To increase equitable access to walking, bicycling and transit mobility options, the county should actively seek grant funding to improve nonmotorized infrastructure that serves the needs of people of color, low-income communities, people with limited English proficiency, and others who may have limited transportation options, and others who may have limited transportation options such as students, youth, seniors, and people with disabilities.
- T-238** New school development should address safe walking and bicycling routes for students. If the existing transportation infrastructure within a one-mile radius, together with the school's road frontage improvements, cannot support safe walking or bicycling to school, King County shall use its development review authority to require the school district and the new school to address the long-

term transportation needs of students, including through the state-mandated Safe Routes to School program.

- T-239 New land use plans and subdivisions shall seek to accommodate internal nonmotorized mobility and access to nearby shopping, parks, trails, schools, healthcare, community resources and other public and private services and facilities, consistent with the different needs and service levels for urban and rural areas.
- T-240 The specifications in the King County Road Design and Construction Standards shall support nonmotorized safety and accessibility, consistent with the county's adopted policies regarding appropriate urban and rural levels of service.
- T-241 In supporting equestrian travel in the rural area, King County should emphasize safety and connection to the Regional Trail System and other established trail networks open to equestrian use.
- T-242 King County shall seek opportunities to acquire and develop nonmotorized transportation corridors. Evaluation of requests to vacate unused road rights-of-way will consider existing nonmotorized uses and future development of such uses.
- T-243 King County should coordinate with bicycling, pedestrian and equestrian stakeholders and advocacy organizations to ensure that their input is included early in the planning and project design process for projects with nonmotorized elements or that have the potential to affect nonmotorized users.
- T-244 King County will participate in and support the Puget Sound Regional Council's regional bicycle network planning efforts. Once a regional network is designated, related project needs within King County's jurisdiction should be incorporated into the county's nonmotorized planning and project prioritization processes.

K. Transportation Demand Management

Transportation affects every aspect of the lives of King County residents, not only in terms of mobility but also in terms of health, economy, and environment. Transportation Demand Management (TDM)

consists of a broad range of strategies that provide for reduced reliance on single occupancy vehicle (SOV) trips, reduced vehicle miles traveled (VMT) and increased efficiency of the whole transportation system. TDM results in lower greenhouse gas emissions and other pollutants.

King County, both as a government and as an employer, is a leader in implementing transportation initiatives and encouraging land uses, policies and development that lead people and businesses to reduce single occupant vehicle (SOV) trips and vehicle miles traveled (VMT), while decreasing the impacts of greenhouse gas emissions from the transportation sector. King County's ability to provide for the mobility needs of its residents will increasingly depend on actively managing the existing transportation system.

TDM strategies include (but are not limited to):

- Public education/information;
- Public transportation (i.e. bus, rail, ferry, and vanpool);
- Nonmotorized travel options;
- State-mandated Commute Trip Reduction and Growth and Transportation Efficiency Centers;
- Roadway and lane management (such as ridesharing, intelligent traffic systems, and active traffic management);
- Variable tolling strategies (such as high-occupancy toll lanes, corridor tolling, cordon tolling, and system-wide tolling);
- Joint use and intermodal transfer facilities (such as park and rides);
- Parking management and pricing (such as connecting supply with mode split targets);
- Telecommunications substitutes for physical travel (such as telecommuting, e-government, and internet-based business-to-business activities); and
- Land use decisions (such as site design standards and concurrency).

In its application of TDM strategies, King County fulfills many roles, including:

- The jurisdiction responsible for land use, transportation infrastructure and permitting in unincorporated areas;
- The operator and manager of unincorporated area roadways and Metro Transit;
- A local, regional and statewide advocate for integrated transportation solutions and climate change actions; and
- A leading edge employer implementing progressive employee transportation programs.

T-245 King County shall implement policies and programs that support transportation demand management, non motorized travel, transit service improvements, and

expansion of high-occupancy-vehicle travel in order to increase the share of trips made by modes other than driving alone.

- T-246** Where appropriate King County should support the use of Transportation Demand Management strategies including variable tolling on state highways to increase mobility options, promote travel efficiency, optimize the existing transportation system and reduce the adverse environmental impacts of the transportation system.
- T-247** King County should consider Transportation Demand Management (TDM) strategies, beyond those adopted as county regulation, among a menu of measures to mitigate for traffic impacts of proposed development or major highway construction projects. TDM, as well as other mitigation requirements, may be imposed on new development as mandatory mitigation measures as necessary to meet the requirements for mitigation of impacts pursuant to the State Environmental Policy Act and the State Subdivision Act.
- T-248** King County should actively participate in developing and implementing state-mandated Commute Trip Reduction and Growth and Transportation Efficiency Centers programs.
- T-249** King County should participate in local, regional, and statewide efforts to implement and measure the results of Transportation Demand Management (TDM) strategies, technologies, and systems, including policies developed through regional consensus and adopted by the county. To this end, the county shall identify funds to research, plan, implement and measure the success of TDM strategies.
- T-250** King County will work with the Washington State Department of Transportation, Washington State Transportation Commission, Puget Sound Regional Council, and cities to develop and implement applications of managed transportation facilities and variable tolling strategies on new and existing transportation facilities. Toll and high-occupancy-toll lane collection systems used in the region should be simple, unified, and interoperable and should avoid the use of tollbooths, whenever possible.

- T-251** King County supports variable tolling strategies as a means to optimize transportation system performance, generate revenues and reduce vehicle miles traveled, and reduce greenhouse gas emissions.
- T-252** Revenue from variable tolling should be used to improve, preserve and operate the transportation system including transit and other multimodal investments, as well as to help fund improvements that address the diversionary impacts on non-tolled facilities.
- T-253** King County should partner with the Washington State Department of Transportation, Puget Sound Regional Council, local jurisdictions, employers, major institutions and developers to implement programs to encourage alternatives to commuting by single-occupant-vehicles, and to improve travel options and awareness of those options.

III. Ensuring Effective Management and Efficient Operations

This section contains policy direction to guide the ongoing design, maintenance, operation and management of the county transportation system to provide for safety, efficiency and sustainability. It is consistent with the goals, objectives and strategies of the King County Strategic Plan (KCSP), which, as a component of the county's Performance Management and Accountability System (PMAS), provides the foundation for managing the performance of county services. The Strategic Plan for Public Transportation (SPPT) and the Strategic Plan for Road Services (SPRS), as transportation functional plans, provide the detailed guidance on operational issues and also address transportation performance measurement and reporting.

A. Public transportation policies and service guidelines

Metro is committed to using resources wisely and increasing the efficiency of its operations. Consistent with its Strategic Plan, Metro emphasizes planning and delivery of productive services and is committed to controlling costs. To help ensure efficiency, Metro uses service guidelines and performance measures to manage the transit system. Performance monitoring helps Metro evaluate its progress, plan and budget for the future, and improve agency practices. Metro is also committed to improving its transparency and so makes performance reports readily available to internal and external audiences.

T-301 King County should provide reliable, safe, convenient public transportation services that are responsive to needs of people, businesses and communities in King County.

T-302 King County should work with the Washington State Department of Transportation, Kitsap County, and other entities offering passenger ferry services, including the King County Ferry District, to ensure that service and capital plans for ferries are consistent with transit service plans and goals.

B. Road services policies and priorities

Effective design, management, and operation of the road system are critical to mobility and quality of life. King County strives to make efficient use of the existing infrastructure, serve the broad needs of users,

address safety issues, and design facilities that are appropriate for the surrounding communities. King County has a structural funding deficit that continues to severely impact the county's ability to provide basic preservation and maintenance of its aging and declining road system. Therefore, as revenue available to manage the road system fluctuates, so will the county's ability to maintain and preserve its roads and bridges. If sufficient revenue is not available to sustain the road system, then infrastructure may be downgraded or closed. The county's focus then will remain on those priorities in the Strategic Plan for Road Services (SPRS) to guide these critical decisions. SPRS also prioritizes funding of services and projects, including both the type of activities and the location of investments. The SPRS lays out the priority for the Road Services Division (RSD) funding decisions in the following order:

1. Regulatory compliance;
2. Safety, narrowly defined as actions to address immediate operational hazards and projects to improve identified collision locations;
3. Maintenance and preservation of existing facilities;
4. Mobility improvements; and
5. Capacity improvements.

Based on the SPRS, King County has implemented a graduated service level framework. Priority will be given to keep the most vital components of the road system operational for users. This approach guides service provision under limited funding scenarios and also helps direct investments toward the most critical needs when additional resources are available. Performance measurement and reporting is also an important aspect of SPRS and a critical tool in managing the county's road system.

To improve efficiency and productivity, starting in 2013, King County will be implementing a data driven asset management approach that, combined with the policy direction in this Comprehensive Plan and the Strategic Plan for Road Services, will guide investment choices over the next biennium and beyond.

RSD's Capital Improvement Program (CIP) and Financial Plan must be consistent with this Comprehensive Plan and consider the current performance of the transportation system, concurrency needs of planned developments, priority projects, phased implementation of improvements, and other related factors. Revenues from a range of sources, including grants and Mitigation Payment System fees, are programmed to appropriate projects.

T-303 King County shall maintain and preserve the unincorporated area road system to keep it operating safely, protect mobility and infrastructure investments, and maximize the useful life of transportation assets to the extent feasible under available funding levels.

- T-304** King County should implement a decision framework in order to keep the most vital components of the road system operational for users. This approach should both guide service provision and help direct investments towards the most critical needs when additional resources are available.
- T-305** To ensure that the most vital components of the county's road system are kept operational, essential regulatory compliance, safety, and maintenance and preservation needs of the road system should be funded prior to mobility and capacity improvements.
- T-306** Maintenance and preservation of the unincorporated rural roadway system shall be emphasized in long-term planning and asset management in recognition of the fact that Rural Area roads and bridges will remain the county's long-term responsibility after all annexations are complete.
- T-307** Roadway stormwater facilities are an integral component of a properly functioning transportation network and shall be maintained, preserved, and, when practicable upgraded in order to protect infrastructure, public health, and the natural environment, as well as meet federal, state, and local regulations.
- T-308** Road projects and programs shall be implemented in ways that avoid or minimize negative impacts for people of color, low-income communities, and people with limited English proficiency, and others who may have limited transportation options, such as students, youth, seniors, and people with disabilities and seek to provide tangible, positive benefits whenever possible.
- T-309** To facilitate the establishment of a safe and efficient traffic circulation network reflecting all transportation modes and to retain the availability of access to adjacent properties, the county shall review and comment on the appropriate placement of new or major modified facilities or physical barriers, such as buildings, utilities, and surface water management facilities in or adjacent to road rights-of-way.
- T-310** State highway facilities and arterial roads are designed to accommodate higher traffic volumes, at higher speeds, than local roads. To protect residential neighborhoods from the impacts of pass through traffic, King County should

design and operate roads to direct such traffic away from local roads and encourage such traffic to use highways or arterials whenever possible.

- T-311** The King County Department of Transportation has responsibility for development and maintenance of transportation facilities in county-owned road rights-of-way. Other right-of-way users must obtain approval from the department regarding projects, maintenance and other activities impacting the right-of-way.
- T-312** Arterial Functional Classification, established in Appendix C of this plan, should be implemented through the specifications provided in the King County Road Design and Construction Standards. The Comprehensive Plan's Urban Growth Area boundary provides the distinction between urban and rural arterials.
- T-313** King County's road design and construction standards shall promote safe, cost-effective roads that encourage multimodal use, and reflect the different needs and service levels for the Urban Growth Area and Rural Area.
- T-314** King County should provide road services in a manner that is sensitive to the natural environment, historical properties, and archaeological resources, and to design new facilities that fit within the context of the built or natural environments in which they are located.
- T-315** King County should preserve its identified Heritage Corridors through context sensitive design, planning, and maintenance, as exemplars of historic and scenic character. The corridors include: Cedarhurst Road/Westside Highway (Vashon Island), Dockton Road (Vashon-Maury Islands), Green Valley Road (Auburn-Black Diamond), Issaquah-Fall City Road (Snoqualmie Valley), Old Cascade Scenic Highway (Stevens Pass), Osceola Loop (Enumclaw Plateau), Old Sunset Highway (Snoqualmie Pass), West Snoqualmie River Road (Snoqualmie Valley), and West Snoqualmie Valley Road/Carnation Farm Road (Snoqualmie Valley). In-kind replacement of road and roadside features and the use of materials that complement the character of each corridor should be utilized to the extent that is practicable and meets safety needs. King County should encourage adjacent property owners, through outreach efforts, to similarly support the preservation of these corridors.

T-316 King County shall support and encourage the preservation and enhancement of scenic, historic, and recreational resources along the designated Washington Scenic and Recreational Highways located in the county, including I-90 (Mountains to Sound Greenway), US 2 (Stevens Pass Greenway), SR 410 (Chinook Pass Scenic Byway), and SR 202 (Cascade Valleys Scenic Byway). The corridor management plans established for these highways should be considered in the development and implementation of King County’s plans, projects and programs.

C. Air Transportation

T-317 King County shall plan, design, and implement services, programs, and facilities for the King County International Airport in compliance with FAA regulatory requirements to support a safe, secure, and efficient global aerospace system.

In 2005, the FAA approved a Part 150 Noise and Land Use Compatibility Plan to reduce noise impacts in communities surrounding Boeing Field. This is a significant event and represents a positive step in making KCIA a “good neighbor” to affected residential areas. The Part 150 plan identifies many actions that are allowed to be taken by KCIA, pilots, tenants, the FAA and others to reduce noise impacts on residential areas.

T-318 Recognizing that certain noise reduction measures are contingent on ongoing and future FAA funding, King County shall implement those actions, under its control and identified in the Part 150 Noise and Land Use Compatibility Plan. King County shall encourage other entities to implement those measures under their control and also identified in the Part 150 Noise and Land Use Compatibility Plan.

T-319 King County shall encourage all airports located in the county, whether owned by a public or private entities, to be responsible neighbors and make all reasonable efforts to minimize noise impacts on sensitive land uses such as residences, hospitals and schools.

D. Climate Change, Air Quality, and the Environment

Clean air contributes to the health of people, the ecosystem and the economy. Transportation is the primary source of air pollutants regionally. In addition to complying with state and federal regulations

described below, the county is working to reduce transportation-related emissions through the policies and actions contained in this Comprehensive Plan.

The Washington State Clean Air Conformity Act establishes guidelines and directives for implementing the federal Clean Air Act Amendments. It specifically links air quality conformity to growth management planning efforts at the local and regional level. The King County transportation system complies with the federal and state Clean Air Acts by maintaining conformity with the Puget Sound Regional Council Transportation 2040 plan and by following the requirements of Chapter 173-420 of the Washington Administrative Code.

Climate change is of significant local, national and global concern. It is clear that greenhouse gas emissions from transportation sources are a significant contributing factor to climate change. In addition to meeting its regulatory requirements, King County is committed to addressing climate change through its decisions and actions and encouraging others to act to reduce greenhouse gas emissions as well.

Climate change is projected to increase the frequency of flood events in most of western Washington's river basins. Increased flood frequency and intensity will increase public investment needed to ensure public safety and mobility, particularly on the county road system. Climate change will affect the county's road and transit infrastructure. More storm events and increased temperatures will disrupt service, increase road maintenance requirements and adversely affect mobility. Changes in precipitation patterns and sea levels may cause greater damage to roads, bridges and seawalls from erosion, landslides, and flooding.

The goals and activities of the King County Department of Transportation are integrally linked to the county's strategies and activities for addressing climate change. In fact, it is not possible to describe the county's efforts to address climate change without discussing how it implements its transportation operations and infrastructure. Therefore, in 2012, the county will initiate its Strategic Climate Action Plan (SCAP) that will emphasize King County's transportation and land use policies.

The SCAP will provide the mechanism by which the county will refine specific strategies and program activities to achieve the twin objectives of reducing greenhouse gas emissions and adapting to climate change impacts. Additionally, the SCAP will identify clear performance targets (how much change is the County attempting to achieve) for those strategies and priority activities. It will allow for the reporting of all strategies, program activities, and performance measures related to climate change in one location. The initial plan, due in 2012, will focus directly on county operations and activities, and, by 2015, the SCAP will be updated to include community level actions.

- T-320** **Transportation improvements should be designed, built, and operated to minimize air, water and noise pollution, greenhouse gas emissions, and the disruption of natural surface water drainage in compliance with provisions and requirements of applicable federal, state and local environmental regulations. Natural and historic resource protection should also be considered. Particular care should be taken to minimize impacts where the location of such facilities could increase the pressure for development in critical areas or rural or resource lands.**
- T-321** **Within new developments, King County supports designing and building roads, bike lanes, pedestrian ways and trails in ways that minimize pollution, provide opportunities for physical activity, promote energy conservation, increase community cohesion, and preserve natural flora and wildlife habitat.**
- T-322** **Through its own actions and through regional partnerships, King County will promote strategies to reduce emissions from the transportation sector. The county will promote new vehicle technologies, fuels and strategies to reduce emissions, including land use changes, provision of transit, promotion of nonmotorized travel, joint purchasing, pilot projects, and other actions to reduce vehicle miles traveled.**
- T-323** **King County will be a leader in the use of transportation fuels and technologies that reduce operational greenhouse gas emissions from its fleets by buying hybrid-electric, electric and other clean transportation technologies; using clean fuels in its fleets; implementing demonstration projects that use alternative fuels and technologies; purchasing locally-produced energy sources when practical; seeking local and federal support to expand the use of alternative fuels and technologies; and promoting best practices, innovations, trends and developments in transportation fuels and technologies. The county will also seek to deploy and use its vehicles in an energy-efficient manner through vehicle routing, idling, and operator practices.**
- T-324** **King County will incorporate climate change impacts information into construction, operations, and maintenance of infrastructure projects. The department will incorporate climate change into its planning and design documents and also develop strategies to incorporate climate change response into the design and operations of its transportation structures and services.**

T-325 King County will develop methods to evaluate the climate change impacts of its actions and transportation services and will implement climate sensitive strategies and practices consistent with the environmental sustainability goals and policies described in Chapter 4, Environment, as well as existing state, regional and local plans, laws, and regulations.

T-326 To the extent practicable, future expansion or redevelopment of the county's road stormwater infrastructure should minimize pollutant discharges and flow alterations by preserving mimicking the natural drainage system or preserving the ability to create such a system in the future.

IV. Financing Services and Facilities that Meet Local and Regional Goals

Fully achieving King County's transportation goals depends on adequate funding for transportation system and service needs. The major economic downturn that began in 2008 has had a severe impact on transportation agencies' ability to maintain and preserve existing facilities and services. Service growth and facility expansion is not possible in the current economic climate. Near term forecasts for economic recovery show slow growth and further cuts or downgrades to some services and facilities will be necessary. This section discusses the extent to which the transportation system and services can be funded within a reasonable revenue forecast and expenditure schedule. The Growth Management Act requires the county to include an analysis of funding capabilities, a multiyear financing plan based on needs, and a discussion of how to raise additional funds to build needed transportation projects, or to reassess growth and level of service (LOS) standards to resolve potential funding shortfalls in a ten-year time frame. This analysis is provided in the Transportation Needs Report and summarized below.

A. Transit Revenue Sources

King County Metro Transit's budget provides for both the operating and capital needs of the public transportation system. The operating budget funds Metro's broad range of public transportation services. The capital budget provides for transit facilities needed to operate Metro's services, such as maintenance and bus storage facilities, transit centers and park-and-rides, bus shelters and other passenger facilities, buses and non-revenue vehicles.

Metro's primary funding source is sales tax. Metro receives sales tax at a rate of 9/10 of one percent, the maximum authorized by the state. This rate has been in effect since late 2006, when voters approved a 0.1 percent increase as part of the Transit Now initiative. In addition, the state legislature has provided two additional funding tools, the use of property tax, and authority for a temporary Congestion Reduction Charge (2012-2013 biennium only), which King County implemented in 2011. These sources contribute a significant but lesser amount to Metro's operations compared with sales tax. Fares paid by users of Metro system and transit advertising revenues provide about a quarter of Metro's operating revenues. Metro also receives federal and state grants that contribute primarily to capital expenses.

Since 2008, Metro has faced significant financial challenges due the recession and slow recovery that limited consumer purchases and therefore the amount of sales tax revenue collected. Metro has taken multiple actions to reduce costs in order to preserve service. Metro eliminated positions not directly related to service delivery, improved the efficiency of bus schedules, increased fares substantially, tapped reserves, deferred planned service expansions and eliminated, reduced or delayed capital projects.

Additional revenues have been added through the property tax authorization and temporary Congestion Reduction Charge mentioned previously. Despite these efforts, an adequate and sustainable revenue source is needed to support planned growth in the Puget Sound Region. Metro still faces significant ongoing cuts without a long term funding source to replace the temporary Congestion Reduction Charge. Several factors influence this need for additional revenue, including: (1) the dramatic fluctuations in the yield of Metro's primary source of revenue (sales tax); (2) the magnitude of the deficit and impact faced by King County Metro if additional funding is not identified; (3) the importance of the transit system to the economic recovery in King County; and (4) the need for significant future growth of the transit system to support projected population and employment growth.

Over the coming years, Metro will continue to take actions to stabilize its finances and improve the efficiency and effectiveness of service delivered as state, county and local officials work on a long-term transit funding solutions.

B. Road-Related Funding Capabilities

King County receives road revenues from a variety of sources, including a dedicated unincorporated King County property tax, federal and state grants, gas tax, local taxes and road mitigation payments from private developments. The dedicated property tax and gas tax provide the largest portion of funding for the Road Services Division (70% in 2012). The property tax is tied to the assessed value of properties in unincorporated King County. Property values in King County have been dropping in recent years and are not projected to rise in the near term. The gas tax is also volatile, in part because of vehicles that are more fuel efficient, lower sales of gas due to the economic conditions and a decline in the allocation to King County due to reduction in road miles from recent annexations.

Financial viability to support the operation of the road system and provide for capital construction and preservation needs is tested over two time frames. The Transportation Needs Report (TNR), the county's 20-year transportation plan, identifies the road-related improvements needed to support the land use vision of the comprehensive plan. The 20-year plan provides an assessment of revenues projected from currently available resources and identifies reasonable options for securing additional revenues over the life of the plan. Secondly, the biennial update of the roads CIP examines the specifics of how to implement the financing plan over the next six years.

C. Funding priorities consistent with transit and road strategic plans

T-401 Financial investments in transportation should support a sustainable, transportation system, consistent with the priorities established in the King

County Strategic Plan and each division's strategic plan or other functional plans.

T-402 King County should fund services, operations, and capital facilities that support local and regional transportation and land use goals and result in a balanced, multimodal transportation system.

T-403 The unincorporated county road system provides transportation connections for large numbers of users that travel through the Rural Area to reach adjoining cities, other counties or regional destinations. King County should seek and support regional funding sources that could be used to repair and maintain the arterial system.

T-404 When funding transportation projects in areas where annexations or incorporations are expected, the Department of Transportation should seek interlocal agreements with the affected cities and other service providers to provide opportunities for joint grant applications and cooperative funding of improvements.

D. Revenue Shortfall

The state Growth Management Act provides guidance for managing a revenue shortfall.

The following actions can be used to balance the funding shortfall of the plan:

1. Reduce transportation funding needs;
2. Develop new revenue options;
3. Change LOS; or
4. Change land use.

T-405 During review of its Comprehensive Plan, King County should consider and address any potential shortfalls likely to occur between expected revenues and needed improvement costs. Such review could include a reassessment of land use, growth targets, LOS standards and revenue availability.

T-406 King County shall continually work to improve the efficiency of its operations and delivery of projects and services in order to minimize the need for new revenue sources.

- T-407** **New funding sources should be identified that would provide adequate and sustainable resources for transportation system improvements and whenever possible provide multi-jurisdictional benefits.**
- T-408** **King County should leverage partnership opportunities, grants and other cooperative funding mechanisms to help finance transportation services, infrastructure and facility improvements.**
- T-409** **King County shall maximize its efforts to obtain federal and state funding for its transportation services, infrastructure and facility improvements.**

V. Coordination and Public Outreach

All elements of the transportation system outlined in this comprehensive plan update are planned and operated in coordination with the cities in and abutting King County, the adjoining counties, the PSRC, the Port of Seattle, the transit agencies providing service in and connecting to King County, and the WSDOT. Agencies and the public were invited to review and comment on this plan.

The following activities support the coordination process:

- Review by the transportation subarea boards;
- Review by residents and organizations within the county's Community Service Areas, including the Unincorporated Area Councils (UACs);
- The update of the Strategic Plan for Public Transportation;
- The statewide and countywide grant application process;
- The TNR and CIP coordination process;
- Participation in the Puget Sound Regional Council, which enables King County to coordinate its transportation planning activities with other local and regional agencies for the four central Puget Sound counties;
- Internet sites and other public information provided in a variety of formats; and
- Public outreach and meetings.

As a countywide transportation service provider, King County provides Metro Transit's public transportation services and works with Sound Transit and other transit agencies to provide seamless, multimodal transit services. King County cooperates with other local governments and WSDOT to improve freight mobility and carry out strategies to maintain the efficiency of freeways and arterials in the region. One such strategy would include active management, which is the ability to dynamically manage recurrent and nonrecurrent congestion based on prevailing traffic conditions. King County works with the PSRC and its members to ensure that the transportation needs of the region's residents and economy are addressed in a timely manner.

A. Regional Coordination

T-501 King County should pursue regional coordination and partnership to address county-wide transportation challenges.

- T-502** King County should promote a multi-jurisdictional regional corridor approach to reducing congestion and improving efficiency on highways and arterial roads.
- T-503** King County should lead, partner in, and promote regional technology initiatives that help to improve mobility.
- T-504** King County should work with the Puget Sound Regional Council and its members to ensure that any regional projected aviation capacity problems, and the air transportation needs of the region's residents and economy are addressed in a timely manner.
- T-505** King County shall support active management of state-owned freeways to optimize movement of people. High-Occupancy-Vehicle (HOV), High Occupancy Toll (HOT) or Express Toll lanes should be managed to prioritize reliable speed advantage for transit and vanpools, and maintain a reliable speed advantage for the other high occupancy vehicles consistent with the State's HOV lane performance standard.
- T-506** King County shall advocate that transit should be exempt from paying tolls as it is an essential element of the transportation system, and is critical to maintaining and increasing the person-carrying capacity of the highway and arterial network. Transit provides an alternative travel mode and improves mobility for all users of the system. Transit also increases the efficiency of transportation infrastructure, thereby reducing investments needed in roadway expansion and additional parking.
- T-507** King County should collaborate with the Puget Sound Regional Council, cities and other affected agencies to develop a regional parking strategy consistent with the parking pricing and management recommendations of Transportation 2040.

B. Freight mobility

Freight mobility is critical to King County's economy and western Washington's role as a major national and international trading region. King County supports efforts to plan and create a fast, reliable freight transportation system in the region. To maintain the region's competitive edge, our transportation

infrastructure must provide for the efficient movement of goods and freight to and from our port, airports, and industrial areas balanced with the needs of general purpose and high occupancy vehicle traffic.

- T-508** **The King County transportation system should support reliable and efficient movement of goods throughout the county, while minimizing the impacts of freight traffic on general purpose traffic and residential neighborhoods. The county should participate in regional efforts and partnerships to achieve these goals.**

- T-509** **King County should support regional freight mobility by incorporating freight considerations into road planning, design, construction, and maintenance.**

- T-510** **King County should coordinate with other jurisdictions, the public and the private sector to identify barriers to the effective and efficient movement of freight and goods and develop proposals to improve freight mobility on the arterial system.**

C. Public Involvement

- T-511** **King County should provide timely, accurate, and consistent public information about transportation services, infrastructure and funding issues, and ensure a wide range of opportunities for input and engagement with county residents and other stakeholders.**

- T-512** **King County should actively engage the public and other appropriate stakeholders, such as the community service areas constituencies, community groups, and subarea transportation forums, in transportation planning processes and plan updates.**